CONTENTS

(Abstracts/contents lists published in: Chem. Abstr.; Curr. Contents; Phys. Chem. Earth Sci., Life Sci.)

Dedication: Professor H. Paulsen xi

The crystal structure of an unusual chromophoric dimeric furan
G. A. JEFFREY AND Y. YEON (Pittsburgh, PA, U.S.A.) 1

Die Molekülstrukturen der 1,6-Anhydrohexofuranosen
P. KÖLL, W. SAAK UND S. POHL (Oldenburg, B.R.D.) 9

Characterisation of four lactose monophosphates by application of ^{31}P-, ^{13}C-, and ^{1}H-n.m.r. spectroscopy
J. BREG, D. ROMIJN, H. VAN HALBEEK, J. F. G. VLIEGENTHART (Utrecht, The Netherlands), R. A. VISSER (Leeuwarden, The Netherlands) AND C. A. G. HAASNOOT (Nijmegen, The Netherlands) 23

The synthesis and osmylation of 7,8-dideoxy-1,2:3,4-di-*O*-isopropylidene-β-L-*glycero*-D-*galacto*-oct-7-enopyranose and related studies
J. S. BRIMACOMBE AND A. K. M. S. KABIR (Dundee, Gt. Britain) 37

Synthesis of a non-isosteric, isopolar monophosphonate analogue of β-D-fructose 2,6-bisphosphate
A. DESSINGES AND A. VASELLA (Zürich, Switzerland) 47

Synthesis of derivatives of 2-amino-2-deoxy-4-*O*-(α- and β-D-galactopyranosyl)-D-glucose
N. E. NIFANT'EV, L. V. BACKINOWSKY, AND N. K. KOCHETKOV, (Moscow, U.S.S.R.) . 61

A total synthesis of hematoside, α-NeuGc-(2→3)-β-Gal-(1→4)-β-Glc-(1→1)-Cer
M. NUMATA, M. SUGIMOTO, S. SHIBAYAMA, AND T. OGAWA (Wako-shi, Japan) . . . 73

3-Azi-1-methoxybutyl β-D-galactopyranoside, a photoaffinity label for monoclonal antigalactan antibodies of the V_H GAL 39.1/55.1 gene-family
G. L. JUNG, K. R. HOLME, C. P. J. GLAUDEMANS (Bethesda, MD, U.S.A.), J. LEHMANN, AND H. LAY (Freiburg, F.R.G.) 87

Studies related to the use of fused bipyranoses for synthesis of polypropionate arrays
D. R. MOOTOO AND B. FRASER-REID (Durham, NC, U.S.A.) 99

Synthesis of everninose, a non-reducing disaccharide component of the orthosomycin-type oligosaccharide antibiotics
V. A. OLÁH, J. HARANGI, AND A. LIPTÁK (Debrecen, Hungary) 113

The structure of the complex formed from D-galacturonate ions and cations in solution
S. J. ANGYAL, D. GREEVES, AND L. LITTLEMORE (Kensington, N.S.W., Australia) . . 121

Total synthesis of neomycin B
T. USUI AND S. UMEZAWA (Kawasaki, Japan) 133

Bridged derivatives of sucrose: The synthesis of 6,6′-dithiosucrose, 6,6′-epidithiosucrose and 6,6′-epithiosucrose
L. HOUGH, L. V. SINCHAREONKUL, A. C. RICHARDSON (London, Gt. Britain), F. AKHTAR, AND M. G. B. DREW (Reading, Gt. Britain) 145

(Continued overleaf)

(contents continued)

An approach to the pyranonaphthoquinones
S. CHEW, R. J. FERRIER (Wellington, New Zealand) AND V. SINNWELL (Hamburg, F.R.G.) 161

Synthesis of D-*ribo*- and L-*lyxo*-phytosphingosine: transformation into the corresponding lactosylceramides
R. R. SCHMIDT AND T. MAIER (Konstanz, F.R.G.) 169

The synthesis of destomycin C, a typical pseudo-trisaccharide of destomycin-group antibiotics
J. TAMURA, S. HORITO, H. HASHIMOTO, AND J. YOSHIMURA (Yokohama, Japan) . . 181

Selektiver Aufbau α-L-(1→4)-verknüpfter 2,6-Didesoxyoligosaccharide
J. THIEM, W. KLAFFKE (Münster, B.R.D.), UND D. SPRINGER (Hamburg, B.R.D.) . 201

Synthetic, conformational, and immunochemical studies of modified Lewis b and Y human blood-group determinants to serve as probes for the combining site of the lectin IV of *Griffonia simplicifolia*
U. SPOHR AND R. U. LEMIEUX (Edmonton, Alberta, Canada) 211

Synthesis of antigenic determinants of the *Brucella* A antigen, utilizing methyl 4-azido-4,6-dideoxy-α-D-mannopyranoside efficiently derived from D-mannose
D. R. BUNDLE, M. GERKEN, AND T. PETERS (Ottawa, Ontario, Canada) 239

Chemical synthesis of L-iduronic acid-containing disaccharidic fragments of heparin
T. CHIBA, J.-C. JACQUINET, P. SINAŸ (Orléans, France), M. PETITOU, AND J. CHOAY (Paris, France) 253

Synthesis of a close analog of the repeating unit of the antifreeze glycoproteins of polar fish
A. K. M. ANISUZZAMAN, L. ANDERSON AND J. L. NAVIA (Madison, WI, U.S.A.) . . 265

The preparation of a partially protected heptasaccharide-asparagine intermediate for glycopeptide synthesis
S. NAKABAYASHI, C. D. WARREN, AND R. W. JEANLOZ (Boston, MA, U.S.A.) . . . 279

Nucleophilic ring-opening in a carbohydrate nitrocyclopropane: A stereospecific approach to chiral isoalkyl structures
H. H. BAER, U. WILLIAMS, AND B. RADATUS (Ottawa, Ontario, Canada) 291

Reaction of butyllithium with benzylidene acetals of aldopyranosides and 1,5-anhydroalditols
D. HORTON AND W. WECKERLE (Columbus, OH, U.S.A.) 305

Structural studies of the O-antigen polysaccharide of *Salmonella thompson*, serogroup C_1 (6,7)
B. LINDBERG, K. LEONTEIN, U. LINDQUIST, S. B. SVENSON, G. WRANGSELL (Stockholm, Sweden), A. DELL, AND M. ROGERS (London, Gt. Britain) 313

Acetal and ester protecting-groups in the hydrogen fluoride-catalysed synthesis of D-fructose and L-sorbose difuranose dianhydrides
J. DEFAYE, A. GADELLE (Saint Martin d'Hères, France) AND C. PEDERSEN (Lyngby, Denmark) 323

D-*glycero*-D-*gulo*-Heptono-1,4-lactone as a precursor for the synthesis of deoxyheptonolactones and anhydro-heptonolactones
K. BOCK, I. LUNDT, C. PEDERSEN, AND R. SONNICHSEN (Lyngby, Denmark) 331

Eine kurze Synthese von Serricornin, (4*S*,6*S*,7*S*)-4,6-Dimethyl-7-hydroxy-3-nonanon, dem Sexualpheromon des Tabakkäfers *Lasioderma serricorne* F., aus D-Glucose
H. REDLICH, K. SAMM, J.-B. LENFERS UND W. BRUNS (Hamburg, B.R.D.) 341

(Continued on facing page)

(contents continued)

Notes

Praktische Darstellung von 1,6-Anhydro-β-D-glucopyranose durch Vakuumpyrolyse von Stärke. Kriterien für den Bau eines Stahlreaktors
M. ČERNÝ, T. TRNKA (Prague, Czechoslovakia), UND H. REDLICH (Hamburg, B.R.D.) . 349

A ^{1}H- and ^{13}C-n.m.r. spectroscopic analysis of six pseudohexoses
K. BOCK, J. F. B. GUZMAN (Lyngby, Denmark), AND S. OGAWA (Yokohama, Japan) . 354

Synthesis of a 2-acetamido-2-deoxy-α-D-galactopyranosyl analogue of tunicamycin
K. KOMINATO, S. OGAWA, AND T. SUAMI (Yokohama, Japan) 360

Synthesis of 3-deoxy-6-thio-D-*manno*-2-octulosonic acid ("6-thio-KDO")
B. CLASSON, P. J. GAREGG, Z. LIU, AND B. SAMUELSSON (Stockholm, Sweden) . . . 369

Author index c1

Subject index c3